



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/716,680 | 11/20/2000 | Timo E. Sivula | | 8410 |

7590 08/13/2003
Perman & Green
425 Post Road
Fairfield, CT 06430-6232

EXAMINER

D AGOSTA, STEPHEN M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2683

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,680

Applicant(s)

SIVULA, TIMO E.

Examiner

Stephen M. D'Agosta

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in ***narrative form*** and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

Claim 1 and 6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1: The claim states "providing the service to the user over a second link" and then states "providing the requested service if the key is valid". The steps appear to be out of order, providing the service is first while checking if the key is valid to provide the service is last (?). Either a check is made first and the service is then provided OR the check is not needed since the service has already been provided. This needs to be re-written/clarified. The examiner has interpreted the claim as checking validity first, then providing the service if key is valid.

Claim 6: The term "certain algorithm(s)" is indefinite. Also, the examiner does not understand the statement "so that the validity of the authentication key can be determined in itself" (where is this specifically discussed in the specification? and what does it mean?).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 3, 9-10, 12 and 14-15 rejected under 35 U.S.C. 102(e) as being anticipated by Miller et al. WO98/47112 (hereafter Miller).

As per **claims 1 and 14-15** , Miller teaches a method for prepayment of a service (abstract), comprising:

Informing the user of the availability of a plurality of different services (figure 1 shows Network device/Kiosk where the user can view what service(s) are offered for purchase, such as air time)

Receiving from the user over a first communications link an indication of a desired service and a request for the desired service (abstract teaches electronic means between purchaser and others for pre-payment AND figure 1, Network device/Kiosk where user requests service)

Receiving from the user an authentication key to indicate prepayment for the requested service (Claim 7, page 30-31 teaches the use of a bank card or pre-registered bank account which reads on authentication).

Verifying whether the authentication key is valid (Claim 7, page 30-31 teaches the use of a bank card or pre-registered bank account which reads on authentication).

Providing the requested service if the key is valid (figure 5 shows the user can perform the prepayment using their cell phone, page 27, L6-8) which would then allow the user to connect to the cellular network and use the requested service AND providing the requested service to the user over a second link (claim 11, page 32 teaches the use of multiple communication links).

With further regard to claim 15, Miller teaches multiple computers/databases being involved in the system (figure 1 shows phone company system, bank system, database #5, switch) which all comprise computers/databases and software programs to perform the necessary steps for the invention's operation.

As per **claim 3**, Miller teaches claim 1 wherein an authentication key is required each time a service is provided (Claim 7, page 30-31 teaches the use of a bank card or pre-registered bank account which reads on authentication each time service is provided).

As per **claim 9**, Miller teaches claim 1 wherein the authentication key is a printed user readable code (Claim 7, page 30-31 teaches the use of a bank card which contains a user readable account number/code and reads on the claim).

As per **claim 10**, Miller teaches claim 1 **but is silent on** concealing the authentication key with a non-reversibly removable concealing means.

The examiner takes Official Notice that Scratch-off, non-reversibly removable concealing means are known (eg. lottery tickets) to prevent theft.

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that the authentication key is concealed with non-reversibly removable means, to prevent the inadvertent stealing of the key without the user knowing it had been compromised/stolen.

As per **claim 12**, Miller teaches claim 1 wherein the first communications link is based on at least one of the following: data network, phone network, mobile network, LAN and WAN (claim 11, page 32 teaches the use of multiple communication links).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Mueller et al. US 6,222,915 (hereafter Mueller).

As per **claim 2**, Miller teaches claim 1 but is silent on wherein the step of informing the user of the availability of a plurality of different services informs the user of the availability of a plurality of different contents, and correspondingly, the step of providing the requested service provides the requested content.

Mueller teaches a method for providing telecommunication-based services (title) whereby the user interacts with a database to input service request(s) [figure 1, #102-106]. Mueller teaches the aim is to successively offer the customer all the service components which the user needs to fulfill his/her service request (C1, L66-67 to C2, L1-6) which would require basic information about each service to be provided to the user (which reads on the claim).

Claims 4 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Geiger et al. US 6,377,810 (hereafter Geiger).

As per claim 4, Miller teaches claim 1 **but is silent on:**

Arranging each of the authentication keys to indicate a time period during which they are valid

Verifying validity of authentication keys by comparing present date with time period the key is valid

Rejecting expired keys.

Geiger teaches a wireless system that uses encryption keys for digital signatures which are checked for validity (ie. current or expired) [abstract, figure 2, #56 and #58, C2, L45-50 and C3, L18-30).

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that encryption keys are checked for validity over a time period, to provide security means by ensuring that a key is only valid for a small time period to make it more difficult to steal a key.

As per **claim 7**, Miller teaches claim 4 **but is silent on:**

Scanning a database of authentication keys for detecting/removing lapsed authentication keys from said database.

Geiger teaches use of authentication keys and a time period that they are valid (or have lapsed). One skilled in the art would provide for tracking (eg. via a database) of the keys for validity/expiration. Hence, two tables would be tracked, valid and expired. This would also provide means for detecting an intruder trying to use the expired key of someone else.

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that a database stores valid/expired keys, to provide means for tracking keys and removing those that are expired.

Claims 5 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Lesley US 6,188,752 (hereafter Lesley).

As per **claim 5**, Miller teaches claim 1 **but is silent on** wherein the method further comprises the following before receiving the request from the user:

Generating the authentication key

Maintaining an authentication key validity database for verifying the validity of any of the generated authentication keys and

Delivering the authentication key to a user.

Previously, the examiner used the concept of a credit card/bank account as an authentication key. Miller is silent on the card/account number being dynamic such that another entity generates it. Lesley teaches providing prepaid telecommunication services (title) whereby the user is assigned a record (eg. authentication key) and associated monetary value which are provided to the user and analyzed by the network to allow/deny a call (abstract and figure 4a, #85 and #87).

As per **claim 8**, Miller teaches claim 5 wherein a user pre-pays for service via a bank card (which is authenticated and debited) and whereby the pre-paid services account is reduced based on usage as is known in the art (abstract and Summary of Invention) which reads on the claim limitation.

Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Carlsson et al. US 6,490,367 (hereafter Carlsson).

As per **claim 11**, Miller teaches claim 9 but is silent on printing a group of authentication keys on a card.

Carlsson teaches a card for that contains the identity and, if appropriate, certificates and signing and authentication keys (C5, L55-60).

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that one can print a group of authentication keys on a card, to provide means for the user to have multiple, time-sensitive keys on one card so that security is increased (since one key isn't used for too long) and for ease of use since only one card is carried/used.

Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Comer US 5,610,973 (hereafter Comer).

As per **claim 13**, Miller teaches claim 1 **but is silent on** the method comprises:

Allowing a user to test a service requested and

Receiving final verification form the user before the user is provided the service.

Comer teaches a (roaming) cellular user that is provided the opportunity of using selected services while roaming in a different service provider's area and acceptance/rejection of the service by the user (abstract).

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that additional services can be tested by the user, to provide means for the user to purchase new services after a trial period to see if they like said service.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

1. Hanson US 6,035,025 teaches prepaid bundled telecomm account.
2. Stimson US 5,577,109 teaches prepaid card system.
3. Dentlinger WO96/41462 teaches prepaid phone services.
4. Mazziotto et al. US 5,301,234 teaches radiophone prepayment operation.
5. Hartmaier et al. US 6,393,269 prepaid wireless service.
6. Nakagawa US 5,583,918 teaches credit card accounting system.
7. Rougnies US 6,424,378 teaches pre-paid cellular telephone system.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7493 for regular communications and 703-746-7493 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist on 703-306-0377.

SMD

8-7-03


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600